DNR Testimony to Congressional Subcommittee on Forests and Forest Health
Wildfires and Their Aftermath: Protecting Communities, Watersheds and Wildlife
October 4th, 2006

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Chairman Walden and Committee Members:

Thank you for your invitation to address the Committee. I'm testifying on behalf of Doug Sutherland, Washington State Commissioner of Public Lands and administrator of the Department of Natural Resources (DNR). DNR is responsible for managing 5.6 million acres of state lands, including forested and agricultural trust lands, aquatic lands and natural areas. The DNR is also responsible for resource protection in Washington.

In my capacity as Executive Director of Regulatory Programs and Washington State Forester, I oversee the wildland fire protection programs on 12.7 million acres of state and private forested lands in the state of Washington. I also oversee the regulation of forest practices on all non-federal lands in the state, as well as providing services and regulation for geology and earth resources in Washington.

The current fire season in the Northwest has been long and intense. When all the fires have been extinguished, we anticipate over 380,000 acres of land will have burned in Washington, making this the most devastating fire year since 1994. No one singular agency could have battled these fires without the synergistic efforts of multiple agencies and communities. I would like to recognize and thank our federal, state and local partners for their sustained efforts and contributions toward the 2006 wildfire campaign in Washington, particularly the United States Forest Service, State Fire Marshals Office and the Washington Fire Service. I would also like to recognize the many communities in Washington, including those in Okanogan County, who are impacted by the large fires but also contributed toward the coordinated suppression efforts.

The cost to the state of suppressing these fires will likely be over $63 million dollars, nearly four times our average annual budget allotted for fire suppression. The Tripod fire was the largest fire in Washington since the Yacolt Burn in 1903. At over 175,000 acres, this lightning-caused fire started in the Okanogan Wenatchee National Forest in very difficult terrain, and more importantly, was in timber that was vastly overstocked and suffering from severe beetle kill that made the forest a tinderbox. The cause of the fire will show as lightning, but the real cause of the devastation can be linked to the long decline in forest health experienced throughout the West. The inability to manage the forests appropriately to ensure productive, healthy forests has led to ever-increasing amounts of dead and down trees. This has added huge amounts of fuel to whatever fires get started, making large, catastrophic fires more and more the rule, rather than the exception. When added to a long history of rapidly suppressing fires that do occur, instead of allowing fire to have its natural place in the ecosystem of the forests, the recipe for conflagrations of historic proportions has been set in place.

We now know that fire needs to have a place in our forest ecosystem, but we cannot return to the days when fire was, and could be, allowed to roam freely in the forests and achieve its role as regulator of the forest. We now have people building and living in the forest in unprecedented and ever-increasing numbers. Many of these new residents of the forest are not familiar with the challenges, and the dangers of living there. They love the beauty of the trees that surround their

homes, allowing the very trees they love to become a hazard to their homes… allowing brush and fuels to accumulate and endanger them, and their property.

Where can we use fire to restore our forests in productive ways? The use of prescribed burning of forested land becomes more difficult as more people move into the forests and towns and cities downwind from them. Prescribed burning has very narrow windows of time when it can be effective to remove the excess fuels that have built up without causing escaped wildfires. These small windows for burning are further limited by weather conditions that are not conducive to dispersing the smoke created, and thus prevent burning altogether during significant portions of the burn window. One lesson to be learned from the fire seasons of this century so far is that there will be smoke. It can come at times of our choosing through prescribed burning to reduce the hazardous fuels conditions in our forests, or it can come from summer-long catastrophic wildfires if we do nothing.

There is another option for reducing those fuels and that is mechanical treatment to remove them. The downside of that alternative is that it will cost from 3-10 times as much as prescribed burning. None of these treatment options are one-time solutions. They must be repeated periodically, every 3-5 years to maintain the reduced fuel loadings. The consequences of not managing our forests and fuels can be severe.

A Desirable Forest Health Program for Washington's Forest

Washington State has examined these complex forest health issues and has developed a comprehensive forest health strategy. In 2004, as directed by the Washington State Legislature, Commissioner of Public Lands, Doug Sutherland, assembled a Forest Health Strategy Work Group (Work Group). The Work Group was asked to examine extensive forest health problems in Washington's forests and to identify opportunities to improve forest health conditions. The Work Group is composed of landowners, land managers, consulting foresters, a hydrologist, a forest entomologist, a fire ecologist, Tribal government, conservation groups, Society of American Foresters, Washington Department of Fish and Wildlife, the University of Washington College of Forest Resources, USDA Forest Service, and the Department of Natural Resources. In December 2004 this Work Group issued a report, *A Desirable Forest Health Program for Washington's Forests*. The Work Group created ten findings and recommendations, ranging from developing forest health risk thresholds to coordinating regulatory programs. Beyond the specific findings and recommendations, the Work Group asserted the following key principles and facts:

- Achieving satisfactory forest health outcomes is a shared responsibility between landowners and the public.
- The keystone to achieving forest health across all ownerships in Washington is that well-managed forests are healthy forests.
- Appropriate funding/investment today will avoid increased costs in the future while at the same time providing many non-market benefits to society.
- Fire suppression costs are rising due to extreme fire behavior caused by high fuel loads and increased tactical complexities when homes and structures are intermixed with the forest. Fire prevention continues to be a very important component of an overall strategy, but activities that promote forest health by reducing tree crowding and fuel loads will provide long-term benefits by altering the trend.
- Fire ecology is the key to restoring proper forest health. Forests managed for resistance to fire damage will also resist damage to native insects, disease

organisms, and extreme weather conditions with the additional advantage of protecting fish, wildlife, watershed, and other public resources.

These principles have been incorporated into both a Washington State Strategic Plan for Healthy Forests and a Strategic Plan for Wildland Fire Protection. You can find both plans on DNR's Internet page. The Strategic Plan for Healthy Forests is at: http://www.dnr.wa.gov/htdocs/rp/forhealth/fhswgc/pdf/strategicplan.pdf and the Strategic Plan for Wildland Fire Protection is at http://www.dnr.wa.gov/htdocs/rp/fire_strategic_plan/

We see that a responsibility of public agencies, particularly the Department of Natural Resources, federal agencies, universities and university extension systems, is to continue to provide the basic information on, and monitoring of, forest health conditions across the state. The Washington DNR cooperates with the US Forest Service's Forest Health Protection Program to provide insect and disease technical assistance, insect and disease detection surveys, and a special bark beetle prevention and restoration program. Public agencies provide information and assistance to forest landowners so they can manage their forests to reduce susceptibility to forest insect outbreaks, disease infections, and fire. Where possible, the state and federal government should provide incentives or financial assistance to achieve the desired outcomes.

Landowners and land managers are responsible for on-the-ground prevention and treatment through a wellness approach. Landowners and managers must have access to the necessary tools and support of public agencies so that they can take actions to control native pests, respond to disturbance events that have the potential to spread insect attack, increase forest diseases, or augment wildfire potential. In areas where forest health issues are a problem, landowners and land managers at all levels need encouragement to practice active management on their forests that incorporates forest health maintenance within their forest management objectives.

The Work Group recognizes there is severe competition for public funding, both state and federal, and that this may appear to be a major impediment to correcting forest health problems. However, investments in prevention provide the opportunity to reduce the many future costs associated with fires, disease and other health breakdowns. Over time, the cost of suppressing fires that occur in these managed stands will be less than suppressing fires in unmanaged areas. Good ecologically and economically balanced forest health across the state is a good investment for the public.

To achieve a *Desirable Forest Health Program for Washington's Forests* we are seeking to develop or implement the following key elements:

- Comprehensive data and information are available so landowners, policy makers and the public can understand existing and developing forest health conditions, identify areas of greatest treatment need, and effectively communicate practical remedies to forest managers, policy makers and the public.
- Easily understandable measures of success exist, and there is effective monitoring for the program.
- An effective legal construct that recognizes landowner objectives and obligations and the role of government and educational institutions along with an effective, efficient program structure with sufficient funding to achieve desired results, including the ability to respond immediately to the detection of exotic insect or disease invaders.

- A tiered approach to ensure an appropriate and effective response based on the severity of forest health conditions, with an emphasis on landowner responsibility for keeping forests healthy.
- Strategic plans and operational programs at appropriate levels to achieve the desired results on all ownerships.
- A focused program, including technical and financial assistance or incentives when appropriate, tailored to family forest owners to increase their understanding of forest health concerns and to take action appropriate to their ownership objectives.
- A cooperative atmosphere across ownerships on forest health and a collaborative approach among private, public, and Tribal landowners, forest health professionals, community wildfire protection planning groups, and other interested parties to achieve cross-boundary results.
- An effective communications plan that informs landowners and managers, forest practitioners, decision makers and the general public on the importance of healthy forests, and the practical ways of achieving healthy forests.
- Forest products processing infrastructure, markets, or market substitutes are in place to partially compensate landowners for the costs involved in undertaking appropriate control activities.
- Improved coordination among regulatory programs so that the key objectives of each can be realized without adverse effects on others.
- Sufficient and stable funding to successfully implement the Forest Health Strategy.

Strategy for Managing Forest Health on State Trust Lands

Thousands of the 2.2 million acres of forested state trust lands are under stress from poor health conditions, such as tree disease, insect infestation, overly dense forest stands, and the presence of undesirable species that are more susceptible to forest pathogens. These problems can increase the risk of catastrophic wildfire and can negatively impact the quality habitat for wildlife species, healthy and sustainable forests, functional ecosystems, economic viability for local communities, and future income to the trusts.

In 2004, the Washington State Legislature created a successful program that was implemented to improve forest health on state trust lands, while the department conducted a statewide forest health assessment. The Legislature authorized a Forest Improvement Program so that DNR could use contract harvesting in specific areas on state trust lands where forest health deficiencies were identified. By the end of the current biennium, DNR will have treated more than 9,000 acres through forest improvement sales. Improving forest health maintains the functionality of forests, provides quality habitat for wildlife and healthy, sustainable ecosystems that benefit everyone.

With continued legislative support for the use contract harvesting for silvicultural treatments, forest health will be improved on more than 200,000 acres of state trust lands yet to be addressed.

Joint Protection and Interagency Fire Suppression

I stated that when all was tolled, we will have burned over 380,000 acres of land this year in Washington. Because land ownerships are so intermingled, the fires almost always affect federal, state and private lands. The Tripod Complex, for example, consumed approximately 164,000 acres of federal land, 11,400 acres of state-managed lands (State Trust Lands and Natural Resource Conservation Area lands) and over 100 acres of privately-owned lands. These losses were from lightning-caused fires that started on federal lands and burned onto state protection. Costs to the state to suppress the portion of the Tripod Complex that burned onto state protection will exceed $13 million. In the past 5 years, the state has spent over $30 million

fighting fires that have burned off of federal lands. Often the last place to stop them has been after they get to state protection, but many times the fires could have and should have been aggressively attacked when first detected, but they were allowed to burn because they were either posing no immediate threat or firefighting resources were not available. Days, weeks, or even a month later these fires can blow-up and threaten state protection.

While spreading from federal to state protection is not unusual, it is also not an exclusive or one-way street. The Columbia Complex fires, in Southeast Washington, started from lightning strikes on lands protected by the state and fire districts. These fires had aggressive suppression action but pushed by high winds they burned nearly 90,000 acres of state and fire district protection before burning into the Umatilla National Forest and consuming nearly another 20,000 acres. The point is that fire does not respect political boundaries and together we must have an integrated and comprehensive approach to addressing forest health, hazardous fuels, and wildland fire management.

Wildland firefighting in Washington is done on a true interagency basis. Firefighting resources from the five federal wildland firefighting agencies, the Washington Department of Natural Resources and those from among the over 500 fire districts and departments making up the Washington Fire Service have an integrated approach of fighting fire side-by-side and on all jurisdictions. Firefighters are dispatched to a fire based upon the "Closest Forces" concept.

While our close relationships are usually highly and mutually beneficial, there have been unilateral actions by federal agencies that have had large negative impacts on the state and the efficiency of firefighting operations. One of these was a decision by a federal committee, the Interagency Committee on Aviation Policy (ICAP) that, just prior to the 2006 fire season, issued an edict that the Federal Excess Personal Property (FEPP) helicopters operated by the state (and owned by the Forest Service) were no longer safe, according to newly imposed US Department of Agriculture and Department of Interior standards, and could not be used to fight fire on federal land. In dispute was the maintenance system used by Washington and three other states, which is the military maintenance system used on the helicopters (safety of flight standards.) The ICAP applied, for the first time, air worthiness standards for private aircraft to FEPP aircraft, which had operated under the public aircraft definition and had not been subject to compliance with a completely different maintenance system. The ICAP did not ground the helicopters (again, actually owned by the USDA/Forest Service); they just prohibited their use on USDA and DOI lands and from carrying federal employees. The strict maintenance standards we have always maintained ensure the same safety margins that the US military adopts. Our flying safety record is a testament to those high standards. This decision not only left a large hole in the DNR aviation budget immediately prior to the fire season, but also prevented the use of these helicopters by USDA and DOI on over 40% of the forested acres in the state. One of the many critical resources in short supply this past fire season was type 2 helicopters, and DNR had 9 of them that could not be used by the BLM or USFS to suppress fires.

This fire season, when fires on federal lands directly threatened state protected lands, DNR took independent but coordinated action with aviation resources, paid for by the state, to control the fire threatening or already burning on our protection. On the Tripod Complex, Washington State incurred nearly $500,000 in aviation expenses to protect state and private lands.

The Loomis State Forest, an Example of Managing for Forest Health and Post-Fire Restoration and Salvage

The following is an example of how a particular landscape, the 136,000 acre Loomis State Forest, is managed to minimize problems related to forest health and catastrophic fire, provide

habitat for species listed under the Federal Endangered Species Act, generate revenue for trust beneficiaries, and protect the viability of the rural community.

The DNR recognized the increased threat from wildfire to the communities, watersheds, and wildlife in and around the Loomis State Forest in the early 1990s. As part of this recognition, a long-term effort to address the risks was undertaken. Over the past 15 years, the Department of Natural Resources has worked to reduce the risk of catastrophic wildfires while, at the same time, improve the health and vigor of the Loomis State Forest.

During that time, approximately 13,000 acres within the Loomis Forest have been managed using commercial timber harvest. The harvests, designed to improve forest health conditions, have removed more than 180 million board feet (MMBF) of dead, dying, and at-risk timber. Many of the harvested areas are planted with species of trees that are less susceptible to the large scale forest health epidemics that have been prevalent over the last decades and that provide for better species diversity across the landscape. As part of the management of the Loomis State Forest over the last decades, a very effective transportation network has also been established to better access the area for timber harvest and fire suppression activities. The efforts to date represent a first step in a long-term effort to improve conditions in the Loomis State Forest.

Part of the effort included the development of long-term goals and objectives for the resources within and around the Loomis State Forest. Due to the complexities of the resources and the controversial nature of the proposed active management of the Loomis State Forest, the DNR developed long-term management plans to guide the activities. The Loomis State Forest Landscape Management Plan and the Lynx Habitat Management Plan were designed in 1996 to ensure adequate wildlife habitat and to provide good quality and quantity of water from the landscape. These management plans outline the activities needing to be implemented over the next 80 years in order to improve the long-term forest health of the Loomis State Forest.

Recently, the Department completed a comprehensive assessment of current watershed conditions within the South Forks Toats Coulee and Sinlahekin Creeks. In addition, the Lynx Plan has been revised to reflect changes in land designations and additional requirements of the Federal Endangered Species Act. As continued active management actions are implemented across the Loomis State Forest, new information and guidelines will be used to adapt management design to ensure continued quality wildlife and watershed resource conditions. The long-term goals that have been outlined in the Loomis State Forest Landscape Management Plan remain valid and management plans will continue to guide harvest plans in order to reduce the risk of catastrophic loss due to wildfire and to improve long-term productivity of a healthy forest.

The Loomis State Forest lies on the fringe of the Okanogan Lynx Management Zone. The Tripod Complex impacted portions of the Central and South Lynx Analysis Units on the Loomis State Forest. The impacts to the available habitat will be determined using on the ground reviews and a soon to be received aerial photographic flight. The reviews of the available information will be used to ensure that the adequate distribution of habitat components such as denning, travel, and foraging areas remain following the wildfire disturbance. While the habitat conditions were historically impacted by wildfires, the size and intensity of the Tripod Complex has resulted in potential long-term impacts to several home ranges of breeding lynx. Travel corridors and denning areas will be re-designated to ensure the long- term populations of lynx can be maintained over time.

Both the South Fork Toats Coulee and Sinlahekin Creek basins have been impacted by the Tripod Complex. DNR scientists are assessing the burned area and are developing strategies to

protect water quality, critical habitats and other resources values. The watershed analyses that have been recently completed have identified resource areas that may be susceptible to disturbances, either by harvest or wildfire. Several prescriptive measures have been adopted to assure that any additional harvest activities do not contribute to resource impacts. As the impacted areas within these watersheds are identified and analyzed, measures will be taken to continue to protect water, and wildlife. The size and intensity of this fire will create long-term challenges for many years to come. The objectives designed with the long-term planning that has occurred on the Loomis State Forest will continue to allow management activities to be adapted to the site-specific conditions.

Along with the wildlife and watershed impacts, the economic impact to the Common School Trust beneficiaries has been substantial. It is estimated that approximately 6,000 acres of trust land is within the fire perimeter. In addition, other areas of forested land were cleared to provide 'contingency' control lines for fire suppression activities. As trust land manager for the beneficiaries, the DNR is planning salvage operations to capture the remaining value in the dead timber in the area of the fire. The first log decks are being sold this week. Areas within the perimeter are being assessed for the need for reforestation. The salvage and reforestation of burned-over areas as soon as possible is key to establishing a healthy, productive, and sustainable forest capable of reaching the objectives for the landscape established in the Loomis Plan, Lynx Plan, and Watershed Analyses.

Within the Loomis State Forest there are 25,000 acres of Natural Resource Conservation Area (NRCA) established to protect the native ecosystems as well as the habitat for endangered and threatened plants and animals. The Tripod fire burned 5,500 acres in the Loomis Natural Resource Conservation Area. Natural Area Ecologists are assessing the burned area and condition of the NRCA to determine what specific actions need to be taken to protect water quality and other resource values and to begin to identify monitoring needs and research opportunities, such as monitoring natural recovery from wildfires in forested and non-forested habitats. This can be done to inform needed land management and fire recovery activities on lands adjacent to the NRCA that have different management objectives

Assisting Private Landowners in Post-Fire Recovery

Soon the fires will be out and fire season 2006 will be just an ugly memory. However, the job of dealing with the damage caused by the fires will continue. State Forest Practices foresters are already taking action to ensure that damage to the ecosystem caused by the fires and firefighting efforts is reversed or minimized. Ensuring that fire trails are reclaimed, re-opened roads are closed again, sediment delivery to streams and creeks is prevented as much as possible…making sure that the fires have the least possible impact.

The fires also leave behind scorched but still valuable timber. However, the value of that timber rapidly declines as insects and diseases rapidly try to invade the injured or killed trees. This decline in value requires expediting Forest Practices Applications to salvage the timber. While Forest Practice rules still need to be followed, all fire salvage applications receive priority for processing. Channels have been opened with cooperating agencies to expedite processing as much as possible.

Private timberland owners have also been impacted by fire, particularly the Columbia Complex fire in Southeastern Washington. DNR Stewardship foresters have reached out to these landowners and, in conjunction with the Natural Resource Conservation Service, Conservation Districts, Washington State University Extension and the Farm Service Agency, have held a meeting to advise landowners of assistance that is available. 140 landowners attended this

meeting with follow-up field workshops scheduled in the coming weeks. The Stewardship foresters have also established expedited assistance to landowners impacted by fire both through technical assistance and through availability of cost-share assistance with post-fire reforestation and wildfire hazard mitigation and reduction through the federal Forest Land Enhancement Program, forest health, and Wildland Urban Interface grant funds.

Cooperative Fire Protection Programs

The availability of state and fire district wildland firefighting resources is assisted greatly by the return of federal tax dollars to Washington through the Forest Service's State Fire Assistance, Federal Excess Personal Property, National Fire Plan and Volunteer Fire Assistance programs and Department of the Interior's National Fire Plan and Rural Fire Assistance programs. Theses programs have built firefighting capacity and provided incentives to communities to do Community Wildfire Protection Plans, as well as providing funds to begin the tasks of reducing fuels around communities that are at risk of wildfire. While there is greatly reduced availability of surplus military equipment, the priority granted to State Forestry agencies under the new Fire Fighter Program should maintain some availability of surplus equipment to help fire districts provide improved wildland fire protection in Washington. The stewardship, forest health protection and Western Bark Beetle grants have been critical to help restore Washington's forests to healthy conditions. The federal agencies have returned $42 million to benefit the citizens of Washington in the last five years. (See Attachment 1)

A Collaborative Approach to Restoring Healthy Forests

The ability to respond to the risks associated with deteriorating forest health on extensive acres across many ownerships is a serious policy challenge. The complexity of both the problems and solutions is due to a series of significant issues that include the following:

- Spatial Scale – Millions of acres in Washington are involved. Many solutions need to be applied at landscape scales or at a size that is often beyond a single owner.
- Time – Given the large spatial scale, a significant amount of time is needed to improve forest health, even if all parties are motivated.
- Costs – Changing forest conditions to improve forest health takes money, but money is not always available.

A collaborative approach among multiple levels of government and non-governmental stakeholders is required to achieve the long-term outcome of restoring healthy forests. At the federal level, it is critical to renew the National Fire Plan commitment to Restoring Fire-Adapted Ecosystems (making management decisions that increase resiliency and improved landscape conditions so that fire can fulfill its appropriate ecological role and benefit natural processes) by:

- Improving the capacity of Forest Health Protection programs so the insect, disease, and weed expertise can be integrated with fire prevention planning and land management activities.
- Strengthening the Western Bark Beetle Prevention/Restoration/Suppression program to enhance education, technical assistance, and land management opportunities for both public and private landowners.
- Supporting development of biomass, energy, and small wood product utilization systems in order to increase removal of low value wood products from forest lands.

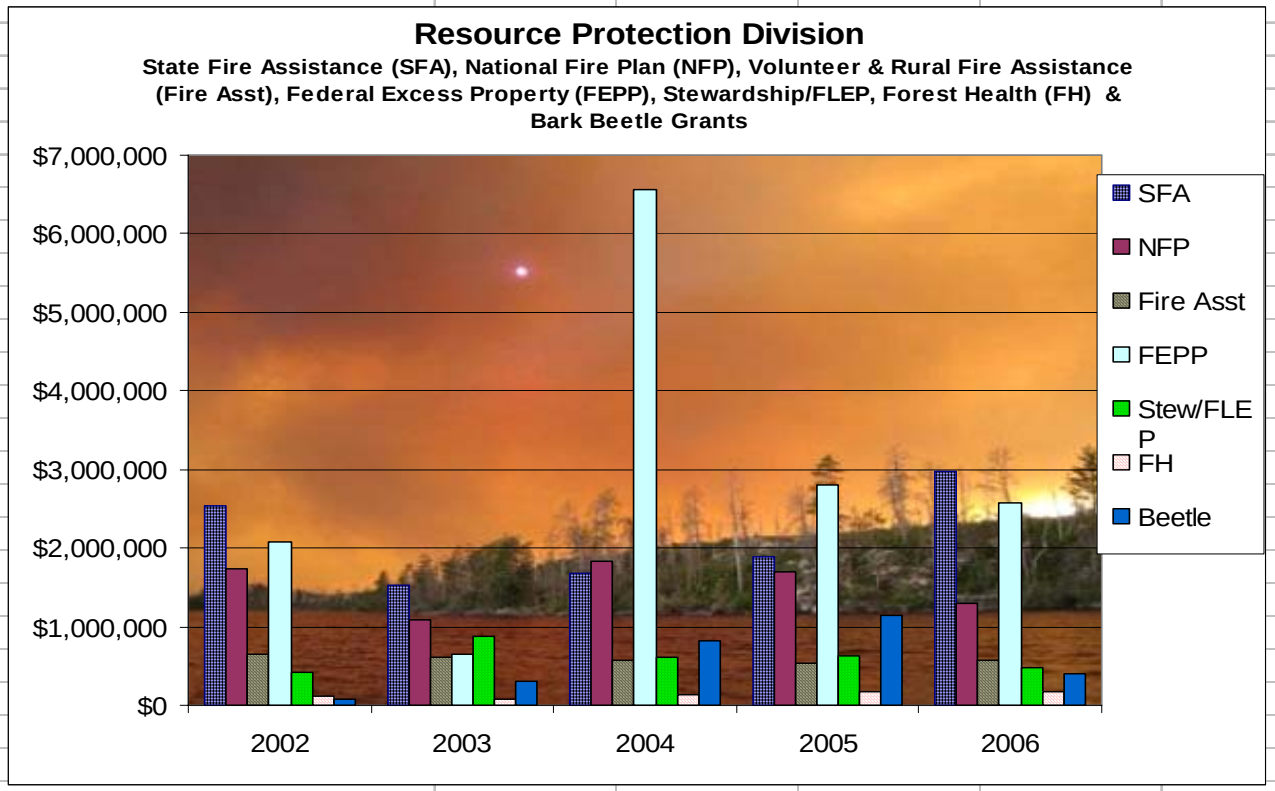
Our forests reached unhealthy, vulnerable conditions over many decades and it will take a sustained and integrated effort from all landowners and public service agencies, through prudently active forest management, to achieve healthy, sustainable conditions across Washington's large landscapes that recognize no political boundaries.

Federal Funds Granted to Washington DNR for Fire Preparedness, Prevention, Fuels, Fire District Assistance, Stewardship & Forest Health

GRANT	2002	2003	2004	2005	2006	Total
State Fire Assistance - Preparedness	$1,048,395	$1,192,025	$1,334,050	$1,249,286	$1,104,345	$5,928,101
State Fire Assistance - Prevention	$1,490,000	$329,500	$344,400	$632,649	$1,862,000	$4,658,549
National Fire Plan (DNR)	$58,750		$1,375,692	$702,200	$934,200	$3,070,842
National Fire Plan (Partners)[1]	$1,673,964	$1,087,277	$450,962	$986,575	$370,820	$4,569,598
Multi-Resource Forest Stewardship/Wildfire Hazard Mit.					$41,640	$41,640
Volunteer Fire Assistance	$407,000	$407,000	$402,500	$407,000	$407,000	$2,030,500
Rural Fire Assistance	$235,000	$205,000	$170,000	$135,000	$163,400	$908,400
FEPP (original value)[2]	$2,081,802	$641,545	$6,555,594	$2,798,251	$2,577,887	$14,655,079
Stewardship/FLEP	$427,000	$883,680	$615,790	$630,048	$427,324	$2,983,842
Forest Health Protection	$119,550	$82,000	$133,500	$168,000	$168,000	$671,050
Western Bark Beetle	$75,300	$310,000	$815,000	$1,153,883	$404,500	$2,758,683
Total	**$7,616,761**	**$5,138,027**	**$12,197,488**	**$8,862,892**	**$8,461,116**	**$42,276,284**

[1]NFP grants are also awarded to other state and local partner organizations

[2]FEPP acquistions are expressed as original value. In most cases, the current value is about 10-25% of the original value.



Attachment 1